

WHAT IS CLAIMED IS:

1. A method of preserving a material subject to oxidative damage comprising adding purified nucleic acid to the material wherein the nucleic acid reduces the rate of oxidative damage of the material.
2. The method of Claim 1, wherein the nucleic acid comprises DNA.
3. The method of Claim 1, wherein the material subject to oxidative damage is Vitamin C.
4. The method of Claim 1, wherein the material subject to oxidative damage is Vitamin E.
5. The method of Claim 1, wherein the material subject to oxidative damage is a vitamin.
6. The method of Claim 1, wherein the material subject to oxidative damage is a food.
7. The method of Claim 1, wherein the material subject to oxidative damage is an antioxidant.
8. The method of Claim 1, wherein the material subject to oxidative damage is a lipid.
9. The method of Claim 1, wherein the material subject to oxidative damage is a pharmaceutical.
10. The method of Claim 1, further comprising adding purified nucleic acid to an aqueous solution of hydrophilic material subject to oxidative damage.

11. The method of Claim 1, further comprising adding purified nucleic acid in a solvent with both hydrophilic and hydrophobic regions to a hydrophobic material subject to oxidative damage.

12. The method of Claim 1, further comprising adding aggregates of nucleic acid less than 50 μM in diameter to a hydrophobic material subject to oxidative damage.

13. The method of Claim 1, further comprising spraying the purified nucleic acid onto the surface of the material subject to oxidative damage.

14. A composition comprising:
a material subject to oxidative damage; and
purified nucleic acid,
wherein the composition comprises an amount of purified
nucleic acid sufficient to reduce the rate of
oxidative damage to the material.

15. The composition method of Claim 14, wherein the
nucleic acid comprises DNA.

16. The composition of Claim 14, wherein the
material subject to oxidative damage is a vitamin.

17. The composition of Claim 14, wherein the
vitamin is Vitamin C.

18. The composition of Claim 14, wherein the
vitamin is Vitamin E.

19. The composition of Claim 14, wherein the
material subject to oxidative damage is a lipid.

20. The composition of Claim 19, wherein the lipid
is heated above ambient temperature.

21. The composition of Claim 14, wherein the
material subject to oxidative damage is a food.

22. The composition of Claim 14, wherein the
material subject to oxidative damage is a pharmaceutical.

23. The composition of Claim 22, wherein the
pharmaceutical is a synthetic estrogen.

24. The composition of Claim 14, wherein the
material subject to oxidative damage is an antioxidant.